Pat. App. 09/857,311 Atty's 21923 measuring window at different angles (β_1, β_2) and displaying them in

parallel or convergingly in the observation window.

1

13

14

The security verification device according to claim 32 wherein the light feed and the light guide device are arranged at the same side of the measuring window.

2

3

- The security verification device according to claim 32 wherein the light feed and the light guide device are arranged at different sides of the measuring window.
- The security verification device according to claim 1 32 wherein the observation window is provided with a viewing screen 2 upon which the light beams impinge adjacent one another. 3
- The security verification device according to claim 1 32 wherein the light feed has a light source. 2
- The security verification device defined in claim 36 1 wherein the light source is constructed to direct white light beams 2 upon the measuring window. 3

- 2 -

Pat. App. 09/857,311

Atty's 21923

38. The security verification device according to claim
2 37 wherein the light source is at least one light emitting diode.

2

39. The security verification device according to claim 32 wherein the light feed is constructed to collect ambient light and directs the ambient light onto the measuring window.

- 40. The security verification device according to claim 39 wherein the light feed is a light guide channel.
- 1 41. The security verification device according to claim
 2 32 wherein the light guide device is a collecting lens and the
 3 measuring window lies in a region of a focal plane of the collect4 ing lens.
- 1 42. The security verification device according to claim 2 41 wherein the collecting lens is a cylindrical lens.
- 43. The security verification device according to claim
 2 42 wherein the collecting lens is configured as a semicylinder,
 3 whereby the measuring window is located at, or at a small distance
 4 from a flat side of the semicylinder.
- 1 44. The security verification device according to claim 2 43 wherein the light guide is embedded in the semicylinder.

- 3 -

Pat. App. 09/857,311

Atty's 21923

3

4

1

2

3

4

5

1

2

3

4

45. The security verification device according to claim
2 32 wherein the light guide is a cylindrical hollow mirror whereby
3 the measuring window lies in a region of a focal plane of the
4 hollow mirror.

- 46. The security verification device according to claim 32 wherein the light guide is formed from individual light guides which are respectively oriented to the light beams reflected at different angles (β_1, β_2) .
- 47. The security verification device according to claim
 46 wherein the light guides have ends open adjacent one another in
 the observation window.
 - 48. An apparatus for the visual comparison of angle-dependent scattering properties of a test object with a respective reference object by an observer, comprising at least two devices (1', 1") according to claim 32 and connected together and having said observation windows thereof lying adjacent one another.
 - 49. The apparatus according to claim 48 wherein one of said devices has a receiver for the reference paper and the other of said devices has an abutment for positioning a security to be validated.

- 4 -

Pat. App. 09/857,311 Atty's 21923 The apparatus according to claim 49 wherein the 50. 1 receiver includes a drum on which one or more reference securities 2 3 can be fastened. 51. An apparatus for the optical testing of flat objects comprising: a housing, an emplacement surface carried by the housing and hawing at least one first region and a second region for supporting an object and for a sliding shifting thereof between the first and second regions, 7 8

a device according to claim 32 which is carried by the housing and whose measuring window lies above the first region of the emplacement surface or coincides therewith, and

9

10

11

12

1

2

3

1

2

3

an infrared camera carried by the housing and targeted on the second region.

- 52. The apparatus according to claim 51 wherein the infrared camera is a black white CCD camera which is provided with a blocking filter for the visible light range.
- 53. The apparatus according to claim 51 wherein a monitor is provided which is carried by the housing and is connected to the output of the infrared camera.

- 5 -

Pat. App. 09/857,311

Atty's 21923

 $\begin{cases} 2 \\ 3 \\ 4 \end{cases}$

1

2

3

4

5

6

7

1

2

3

. 1

2

1

2

3

54. The apparatus according to claim 51 wherein the housing has a second light source which is trained from above onto the second region and has a significant proportion of its radiation in an infrared region and is selectively capable of being switched on.

55. The apparatus according to claim 54 wherein the second light source is a glow filament lamp.

- 56. The apparatus according to claim 51 wherein the second region of the emplacement surface is light permeable and the housing carries a third light source which is trained from below onto the second region and has a significant proportion of radiation in an infrared range and can be selectively switched on.
- 57. The apparatus according to claim 56 wherein the third light source also has a significant proportion of its radiation in the visible light range.
 - 58. The apparatus according to claim 57 wherein the third light source is a glow filament lamp.
 - 59. An apparatus according to claim 51 wherein the emplacement surface has a third region for supporting the object and for sliding shifting thereof between the first region, the

- 6 -